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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/587,270

06/05/2000

Pasi Loukas

8475

7590

03/24/2004

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FINLAND

EXAMINER

HA, DAC V

ART UNIT

PAPER NUMBER

2634

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/587,270

Applicant(s)

LOUKAS, PASI

Examiner

Dac V. Ha

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,5,8,9 and 12-16 is/are rejected.
- 7) ☒ Claim(s) 6,7,10 and 11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 4, 5, 8, 9, 12-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fullerton (US 6,549,567) in view of Zorabedian et al. (US 6,526,071) (hereinafter Zorabedian).

Regarding claim 4, Fullerton teaches the claimed subject matter "sending one-cycle ... carrier wave" and "receiving ... by them" in Figures 1A, 2A, 5A, 9; Abstract; Col. 5, line 20 to Col. 7, line 66. Fullerton differs from the claimed invention in that it doesn't teach "wherein ... being sent". However, Zorabedian teaches that the concept of utilizing different wavelength for transmitting different data streams is not new in the art of communication (Col. 1, line 64 to Col. 2, line 14). Therefore, the claimed subject matter "wherein ... being sent" would have been optional to one skilled in the art.

Regarding claim 12, see claim 4 above and also Fullerton, Figure 7.

Regarding claim 14, Fullerton teaches the claimed subject matter "multiple wireless ... impulses" in Figures 1A, 2A, 5A, 7, 9; Abstract; Col. 5, line 20 to Col. 7, line 66. Fullerton differs from the claimed invention in that it doesn't teach "wherein ... use". However, Zorabedian teaches that the concept of utilizing different wavelength for different data streams is not new in the art of communication (Col. 1, line 64 to Col. 2,

line 14). Therefore, the claimed subject matter "wherein ... use" would have been optional to one skilled in the art.

Regarding claim 5, Fullerton further teaches the claimed subject matter "wherein ... data being sent" in Col. 7, lines 1-27.

Regarding claim 8, the claimed subject matter "wherein ... each channel" would have been obvious to one skilled in the art based on the concept of wavelength division multiplex taught by Zorabedian (Col. 1, line 64 to Col 2, line 14).

Regarding claim 9, the claimed subject matter "wherein ... real-time" would have been obvious to one skilled in the art based on the concept of wavelength division multiplex taught by Zorabedian (Col. 1, line 64 to Col 2, line 14).

Regarding claim 13, the claimed subject matter "wherein ... said impulses" would have been understood by one skilled in the art since the system in Fullerton would have been capable of transmitting and receiving different wavelength pulses.

Regarding claim 15, see claim 9 above.

Regarding claim 6, the claimed subject matter "wherein ... real-time" would have been obvious to one skilled in the art based on the concept of wavelength division multiplex taught by Zorabedian (Col. 1, line 64 to Col 2, line 14).

Allowable Subject Matter

3. Claims 6, 7, 10, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mueller et al. (US 6,391,021) disclose Method For Non-Synchronous Laser-Assisted Myocardial Revacularization With Stationary Firing.

Brooker et al. (US 6,141,431) disclose Methods And Apparatuses For High-Speed Control Of Lamp Intenisties And/Or Wavelengths And For High-Speed Optical Data Transmission.

Savit (US 4,589,285) discloses Wavelength-Division-Multiplexed Receiver Array For Vertical Seismic Profiling.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 703-306-5536. The examiner can normally be reached on 5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Dac V. Ha", with a horizontal line drawn underneath it.

Dac V. Ha
Examiner
Art Unit 2634